

OKLAHOMA AGRICULTURAL EXPERIMENT STATION
STILLWATER, OKLAHOMA

PLANT MATERIALS //

9-11-74

KANSAS AGRICULTURAL EXPERIMENT STATION
MANHATTAN, KANSAS

TEXAS AGRICULTURAL EXPERIMENT STATION
COLLEGE STATION, TEXAS

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
AND
SOIL CONSERVATION SERVICE

Edward J. H. 11-1-74 NOTICE OF RELEASE OF TEXOKA BUFFALOGRASS

The Oklahoma, Kansas, and Texas Agricultural Experiment Stations and the Agricultural Research Service and Soil Conservation Service, U. S. Department of Agriculture, announce the release of Texoka buffalograss. The variety resulted from the cooperative research of the Oklahoma Agricultural Experiment Station and the Agricultural Research Service at the U. S. Southern Great Plains Field Station, Woodward, Oklahoma.

Texoka is a broad based synthetic variety derived from ten selected clones, four female and six male. The parents of these clones were selected from Texas, Oklahoma, and Kansas buffalograss populations. The name Texoka was composited from the above named States. Texoka was tested under the experimental designation W2.

The most significant attribute of Texoka is its high seed production potential. The parent clones of this dioecious variety were known to produce in their offspring a high percentage of female plants. Texoka frequently produced over 1,000 pounds of burs per acre, ten times that commonly produced in range harvests, at the Fort Reno Livestock Research Station, Agronomy Research Area near El Reno, Oklahoma and at the J. E. "Bud Smith" Plant Materials Center, Knox City, Texas.

Texoka was superior to most commercial lots of buffalograss in forage production. None of the commercial sources surpassed Texoka in forage yield.

Texoka is well adapted to western Oklahoma, western Kansas, and northwestern Texas. It has been widely evaluated in these areas by the Soil Conservation Service. Texoka is well-suited for forage production on rangeland, for control of erosion on critical areas, and for turf on recreational areas.

Breeder seed consists of seed harvested from the original crossing block that was established by vegetatively propagating each of the ten clones. Seed multiplication of Texoka is limited to two generations of increase from breeder seed; namely, one each of foundation (Syn 2) and certified (Syn 3). One hundred and twenty-five (125) pounds of breeder seed of Texoka harvested in the early 1960's will be maintained in cold storage.

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by the Oklahoma Agricultural Experiment Station. Foundation Seed is available to qualified producers of pedigreed seed from Oklahoma Foundation Seed Stocks, Department of Agronomy, Oklahoma State University Stillwater, Oklahoma 74074. Certified seed will be available in 1975 or 1976. USDA has no seed for distribution.

Suggested release date for Texoka is July 31, 1974, but press releases will be delayed until certified seed becomes available.

/S/ James A. Whatley
Director
Oklahoma Agricultural Experiment
Station
Date 7/16/74

/S/ T. W. Edminster
Administrator
Agricultural **Research** Service
Date 8/26/74

/S/ Floyd W. Smith
Director
Kansas Agricultural Experiment
Station
Date 7/22/74

/S/ Victor H. Barry, Jr.
Director
Plant Science Division
Soil Conservation Service
U.S. Department of Agriculture
Date 7/19/74

/S/ Jarvis E. Miller
Director
Texas Agricultural Experiment
Station
Date 8/9/74

BUFFALOGRASS (Buchloe dactyloides)

DESCRIPTION: Perennial, stoloniferous, generally dioecious, highly palatable, drought-resistant pasture grass.

ADAPTATION: Widely adapted to soils where climatically adapted, Does best on clay and loam types. Will survive on shallow soils too droughty for Bermudagrass. Is best adapted to areas with 15 to 35 inches of annual rainfall, Other pasture plants may crowd it out in high rainfall belt,

PLANTING :

Rate: In terms of pure live seed per acre:

a. Broadcast, 11 pounds.

b. In rows, 4 pounds.

Time: Plant when harvested or during the fall and winter to February. Seed may be sown later in the spring but germination is likely to be low. Good moisture and low temperature conditions are necessary for best germination, Sodding should be done during late winter and early spring when moisture and temperature conditions are most favorable. Buffalograss does not have underground stems and harvested sod is not as drought-resistant as Bermudagrass.

Method: Unless a good supply of home-grown seed is available, it is not advisable to sow broadcast. Sow in furrows made on a well prepared and firm seedbed and cover lightly, or from one-half to one inch. In extreme western part of the state Buffalograss may be seeded in mixtures with other grasses on a small grain stubble mulch or on a sorghum or sudan mulch grown in place. Where sod is available without hauling long distances, propagation by setting pieces of sod in furrows on a well prepared seedbed is usually the best method of establishing Buffalograss. Buffalograss must be handled carefully to prevent drying out and killing. Sod should be set as soon after digging as possible. It must be placed in the same position as when growing and packed into the soil or soil placed around the edge of each sod piece so that E d contact is made with moist soil.

USES: Grazing, lawns, erosion control, waterways, and pasture outlets,

Viability of Seed: At least three years and probably longer.

MANAGEMENT:

Cultivating: Cultivation of seedlings of sod is necessary for rapid spread, Cultivate row plantings as for corn and other row crops until grass begins to root in row middle, Mow or graze lightly to control weeds where cultivation is not practiced.

Harvesting: Small amounts of seed for home use may be harvested by sweeping up burs and trash with a stiff broom, or cutting the grass low with a lawn

mower. Seed may be harvested with special machinery designed to pick up burs by suction. A combine may be used to harvest seed where grass grows tall enough for combine harvesting.

NOTE: Burs should be examined carefully to see if filled with good seed before harvesting as often many burs do not contain seed.

Grazing: Although Buffalograss will survive overgrazing during most seasons, best results are obtained by deferred or rotated grazing of this grass.

REFERENCES: Cir. 328, U.S. Dept. Agr., Methods of Re-establishing Buffalograss in the Great Plains.

Vol. VI, No. 5, November, 1940, U. S. Dept. Agr., SCS, The Collection and Processing of Buffalograss Seed.

Unnumbered Leaflet, January 20, 1942, Fort Hays, Kansas Expt. Sta., Treatment and Use of Buffalograss Seed.